The Objection

Claim 8 stands objected to as being dependent upon a rejected base claim. The Office Action states that Claim 8 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Applicants have rewritten Claim 8 in independent form and reconsideration and withdrawal of the objection is respectfully requested.

The Rejections Under 35 U.S.C. §102(b)

Claims 7, 9 and 18 stand rejected under 35 U.S.C. §102(b) as being anticipated by Barmore et al. (WO 99909824; 3/4/99). The Office Action states that Barmore discloses a method for controlling beetles in stored products (paper, candy, etc.) the method comprising applying to said product thymol oil. Applicants traverse the rejection for at least the following reasons.

Barmore et al. neither anticipates nor teaches Applicants' invention as recited in the claims herein presented. At best, Barmore et al. merely discloses a composite article incorporating neem oil or thyme oil for controlling sawtoothed and confused flour beetles. Barmore et al. does not expressly or specifically disclose all of the features of Applicants claimed invention. Barmore does not disclose the use of thymol against beetles, or thymol against maize weevils. Applicants respectfully submit that thyme oil and thymol are not equivalents. According to PDR for Herbal Medicines (Gruenwald et al., First Edition 1998), thyme oil, the volatile oil for *Thymus vulgaris* (i.e., thyme), comprises thymol, p-cymeme, carvacrol, borneol and linalool. (See column 2, page 1184). Nowhere does Barmore et al.

disclose or teach that thymol is the active acting ingredient of thyme oil effectuating control of beetles. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections to the claims as presented herein.

CONCLUSION

Early consideration and prompt allowance of the pending claims are respectfully requested. If anything could be done to place this application in condition for allowance, e.g., by Examiner's Amendment, Applicants respectfully request that the Examiner contact the undersigned representative at the telephone number listed below.

To the extent necessary, please grant any extension of time deemed necessary for entry of this communication. Please charge any deficient fees, or credit any overpayment of fees, to Deposit Account 500417.

Respectfully submitted,
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DATE: July 10, 2002

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ATTACHMENT

Version With Markings To Show Changes Made

IN THE CLAIMS

Claim 7 is canceled without prejudice to, or disclaimer of, the subject matter it contains.

Claims 8, 9 and 24-29 are amended as follow.

7. (Canceled)

8. (Twice Amended) [The method of Claim 7]A method for controlling beetles comprising applying to the locus where control is desired a pesticidally-effective amount of a composition comprising, in admixture with an acceptable carrier, at least one plant essential oil compound or derivative thereof wherein, the plant essential oil compound or derivative thereof comprises a monocyclic, carbocyclic ring structure having six-members and substituted by at least one oxygenated or hydroxyl functional moiety.

9. (Twice Amended) [The method of Claim 7]A method for controlling beetles comprising applying to the locus where control is desired a pesticidally-effective amount of a composition comprising, in admixture with an acceptable carrier, at least one plant essential oil compound or derivative thereof wherein, the plant essential oil compound or derivative thereof is selected from the group consisting of aldehyde C16 (pure), α-terpineol, amyl cinnamic aldehyde, amyl salicylate, anisic aldehyde, benzyl alcohol, benzyl acetate, cinnamaldehyde, cinnamic alcohol, carvacrol, carveol, citral, citronellal, citronellol, p-cymene, diethyl phthalate, dimethyl salicylate, dipropylene glycol, eucalyptol (cineole), eugenol, iso-eugenol, galaxolide, geraniol, guaiacol, ionone, menthol, methyl anthranilate, methyl ionone, methyl salicylate, α-phellandrene, pennyroyal oil perillaldehyde, 1- or 2-phenyl ethyl alcohol, 1- or 2-phenyl ethyl

propionate, piperonal, piperonyl acetate, piperonyl alcohol, D-pulegone, terpinen-4-ol, terpinyl acetate, 4-tert butylcyclohexyl acetate, [thyme oil,] thymol, metabolites of trans-anethole, vanillin, and ethyl vanillin.

24. (Amended) A method for controlling sawtoothed grain beetle adults comprising, applying to the locus where control is desired a pesticidally-effective amount of 2-phenyl ethyl alcohol, 2-phenyl ethyl propionate, benzyl alcohol, and α-terpineol, in admixture with an acceptable carrier.

25. (Amended) A method for controlling sawtoothed grain beetle adults comprising, applying to the locus where control is desired a pesticidally-effective amount of benzyl alcohol, in admixture with an acceptable carrier.

26. (Amended) A method for controlling sawtoothed grain beetle adults comprising, applying to the locus where control is desired a pesticidally-effective amount of 4-Blend (2-phenyl ethyl alcohol, 2-phenyl ethyl propionate, benzyl alcohol, and α-terpineol)10%, eugenol 1.7%, α-terpineol 1.7%, and cinnamic alcohol 1.7%, in admixture with an acceptable carrier.

27. (Amended) A method for controlling sawtoothed grain beetle adults comprising, applying to the locus where control is desired a pesticidally-effective amount of 4-blend (2-phenyl ethyl alcohol, 2-phenyl ethyl propionate, benzyl alcohol, and α-terpineol)10%, eugenol 2.5%, thymol 3%, and cis-jasmone 0.6%, in admixture with an acceptable carrier.

28. (Amended) A method for controlling sawtoothed grain beetle adults comprising, applying to the locus where control is desired a pesticidally-effective amount of 2-phenyl ethyl propionate 3.75%, thymol 3.0%, eugenol 2.5%, and PD98059 0.03%, in admixture with an acceptable carrier.

29. (Amended) A method for controlling sawtoothed grain beetle adults comprising, applying to the locus where control is desired a pesticidally-effective amount of 2-phenyl ethyl alcohol, 2-phenyl ethyl propionate, benzyl alcohol, α-terpineol and eugenol, in admixture with an acceptable carrier.

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Daily Dosage: The average daily dosage is 4 to 6 gm of herb. As a stomachic, drink one cup of the infusion before meals.

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Thymus Vulgaris

Thyme

DESCRIPTION

Medicinal Parts: The medicinal parts are the oil extracted from the fresh, flowering herb, the dried leaves, the striped and dried leaves, and the fresh aerial part of the flowering plant.

Flower and Fruit: The blue-violet to bright red labiate flowers are in 3 to 6 blossomed axillary clusters. The calyx is bilabiate with a 3-tipped upper lip and a 2-tipped lower lip. The upper lip of the corolla is straight and the lower lip is divided in 3. The stamens are splayed from the base.

Leaves, Stem and Root: The plant is a dwarf shrub up to 50 cm high with an erect, woody and very branched-bushy and downy stem, which never roots. The leaves are short-petioled, linear or oblong-round, acute, glandular-punctate with an involute margin and a tomentose under surface.

Characteristics: The odor is aromatic and the taste tangy, somewhat bitter and camphor-like.

Habitat: The plant is indigenous to the Mediterranean region and neighboring countries, northern Africa and parts of Asia. It is extensively cultivated.

Production: Thyme consists of the stripped and dried leaves and flowers of Thymus vulgaris, Thymus zygis, or both species.

ACTI NS AND PHARMAC LOGY

COMPOUNDS

Volatile oil (1.0-2.5%): chief components thymol (20-55%), p-cymene (14-45%), carvacrol (1-10%), borneol (up to 8%), linalool (up to 8%)

Caffeic acid derivatives: rosmarinic acid

Flavonoids: including, among others, luteolin, apigenin, naringenin, cirsilineol, cirsimaritin, thymonin, partially present as glycosides

Triterpenes: including, among others, ursolic acid (2%), oleanolic acid (0.6%)

EFFECTS

Thyme is a bronchial antispasmodic, an expectorant, and an antibacterial agent.

INDICATIONS AND USAGE

- Cough
- Bronchitis

The herb is used internally for symptoms of bronchitis and whooping cough. Externally, it is used for catarrh of the upper respiratory tracts and as a skin irritative rub. It is antibacterial and deodorizing. In folk medicine, thyme is used as a stomachic for its spasmolytic effect, as a carminative, a diuretic, as a urinary disinfectant and as a vermicide.

PRECAUTIONS AND ADVERSE REACTIONS

No health hazards or side effects are known in conjunction with the proper administration of designated therapeutic dosages. The drug possesses a low potential for sensitization. Where large skin injuries or acute skin illnesses, severe feverish or infectious diseases, cardiac insufficiency or hypertonia are present, entire-body baths should be carried out only following consultation with a doctor, no matter what the active agent is.

DOSAGE

Mode of Administration: Thyme is available as a comminuted drug, powder, liquid extract or dry extract for infusions and other galenic preparations. Liquid and solid medicinal forms for internal and external application are available. Combinations with other herbs, which have expectorant action, are also available. Extracts of the drug are components of standardized preparations of antitussive and cough remedy teas.

Preparation: To prepare a tea, use 1.5 to 2 gm drug with boiling water, steep for 10 minutes, then strain. (1 teaspoonful is equivalent to 1.4 gm drug.)

Daily Dosage: The recommended daily dosage is 10 gm drug with 0.03% phenol, calculated as thymol. When using a liquid extract, 1 to 2 gm is taken 1 to 3 times daily. The tea

can be taken several times a day as needed. A 5% infusion can be used for compresses.

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Tiarella Cordifolia

Coolwort

DESCRIPTI N

Medicinal Parts: The medicinal part is the herb.

Flower and Fruit: The plant has inconspicuous white flowers in racemes. The buds are pink-tinged. The few seeds are somewhat clavate. They have a light acrid taste and are odorless.

Leaves, Stem and Root: The plant is a 15 to 20 cm high herbaceous perennial, which produces runners. The simple leaves are usually slightly 5-lobed and cordate. The basal leaves are often deep red-orange. The cauline leaves have deep red spots and veins, although the latter are often lacking.

Habitat: The plant is indigenous to North America from Virginia to Canada.

Production: Coolwort is the aerial part of Tiarella cordifolia.

Other Names: Foam Flower, Mitrewort

ACTIONS AND PHARMACOLOGY

COMPOUNDS

The effective agents of the plant are unknown.

EFFECTS

The herb is a diuretic and a tonic.

INDICATIONS AND USAGE

Coolwort is used for conditions of the urinary tract and digestive disorders.

PRECAUTIONS AND ADVERSE REACTIONS

No health hazards or side effects are known in conjunction with the proper administration of designated therapeutic dosages.

DOSAGE

Mode of Administration: The drug is ground for infusions.

LITERATURE

No literature available.

Tilia Species

Linden

DESCRIPTION

Medicinal Parts: The medicinal parts are the fresh and dried flowers.

Flower and Fruit: The yellowish-white flowers are clusters of 5 to 11 in cymes. The calyx is 5-sepaled, oblong or ovate-lanceolate, acute and deep. The 5 petals are spatulate-lanceolate with crenate tips. There are numerous stamens and 1 superior ovary, which is almost globular and has silky-haired villi. The fruit is a 1-seeded, pear-shaped, indistinctly angular, thin-shelled nut. There is a tongue-shaped, parchment-like, greenish- or yellowish-white bract at the base of the flowers.